

Completed Return-On-Investment Project Case Study



United States Department of Energy
Office of Environmental Management
Fact Sheet

Waste Sort and Compaction Facility Savannah River Site, South Carolina

Original Problem

SRS generates large quantity of low level waste from its routine and cleanup activities. Waste packaging often contains voids due to generator in-field waste packaging capabilities. Capacity of waste disposal cells/vaults is limited.

The ROI Project Solution

The Waste Sort Facility (WSF) was constructed to reduce the volume of low level waste requiring disposal. The WSF is designed to receive, unload, sort, and repackage Low Level Waste from B-25 boxes. The WSF will separate legacy and newly generated Low Level Waste for incineration, compaction or direct burial. The WSF includes a sort table and glove box to segregate waste and a shredder for ability to size reduce waste.

Value Of Improvement

The WSF significantly reduced the volume of low level waste to the Low Activity Waste Vault (LAWV). Segregation of waste into treatability groups allows more cost effective treatment and disposition, and will reduce LAWV space use in the future.



DOE Monetary Benefits

Cost	\$2.8 Million
Lifecycle Savings	\$50 Million
Return on Investment	330 %

Benefits At-A-Glance

- 1435 - B-25 Boxes sorted since operation began
- 14,527 drums compacted since operation began
- Estimated cost savings of \$50M over project life

Lifecycle Waste Reduction

Life Cycle Waste Reduction	None (cost-effective segregation)
Operation Commencement Date	1998
Project Useful Life (Years)	5

Waste Sort and Compaction Facility

Savannah River Site, South Carolina

Summary Data

ROI Priority Area:	Waste Management
ROI Project Type:	Other (Waste Treatment)
Project Cost:	\$2.8M
Lifecycle Savings:	\$50,000,000
Implementing Group:	EM, SRS Solid Waste Division
Benefiting Group:	EM, SRS Solid Waste Division
Useful Life Years:	5 Years
Return On Investment:	330 %
Lifecycle Waste Reduction:	None
Project Contact:	Tim Coffield
Phone:	803-557-6316
Email:	tim.coffield@srsr.gov

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